DOCKET NO.: ISIS-0710

PATENT

On page 13, line 36, after "use of the", please delete "deaminse" and substitute therefore --deaminase--.

On page 24, line 20, after "silica gel", please delete "chromatograph" and substitute therefore --chromatography--.

In the claims:

Please rewrite claims 9 and 10 as follows and add new claims 15 and 16.

9. (Amended) An oligomer comprising at least one subunit having the structure:

wherein X is $R_{\chi} - (R_2)_n$;

 R_1 is C_1 - C_{20} alkyl, C_2 - C_{20} alkenyl, or C_2 - C_{20} alkynyl; R_2 is halogen, hydroxyl, thiol, keto, carboxyl, nitro, nitroso, nitrile, trifluoromethyl, trifluoromethoxy, 0-alkyl, S-alkyl, NH-alkyl, N-dialkyl, 0-aryl, S-aryl, NH-aryl, 0-aralkyl, S-aralkyl, NH-aralkyl, amino, imidazole, N-phthalimido, azido, hydrazino, hydroxylamino, isocyanato, sulfoxide, sulfone, sulfide,

disulfide, silyl, aryl, heterocycle, carbocycle, intercalator, reporter molecule, conjugate, polyamine, polyamide, polyalkylene glycol, polyether, a group that enhances the pharmacodynamic properties of oligonucleotides, or a group that enhances the pharmacokinetic properties of oligonucleotides;

either one of T_3 and T_5 is OH, a hydroxyl blocking group, phosphate or an activated phosphate group and the other of T_3 and T_5 is a further subunit of said oligomer, or both T_3 and T_5 are a further subunit of said oligomer [T_3 and T_5 independently are OH or a further subunit of said oligomer that is joined to said structure]; and

n is an integer from 0 to about 6.

10. (Amended) An oligomer comprising at least one subunit having the structure:

$$\begin{array}{c|c}
 & NH_2 \\
 & NM_2 \\
 & NM_$$

wherein X is $R_1-(R_2)_n$;

R₁ is C₁-C₂₀ alkyl, [C₂] <u>C</u>₄-C₂₀ alkenyl, or C₂-C₂₀ alkynyl;
R₂ is halogen, hydroxyl, thiol, keto, carboxyl, nitro,
nitroso, nitrile, trifluoromethyl, trifluoromethoxy, O-alkyl, Salkyl, NH-alkyl, N-dialkyl, O-aryl, S-aryl, NH-aryl, O-aralkyl,
S-aralkyl, NH-aralkyl, amino, imidazole, N-phthalimido, azido,
hydrazino, hydroxylamino, isocyanato, sulfoxide, sulfone,

DOCKET NO.: ISIS-0710

PATENT

sulfide, disulfide, silyl, aryl heterocycle, carbocycle, intercalator, reporter molecule, conjugate, polyamine, polyamide, polyalkylene glycol, polyether, a group that enhances the pharmacodynamic properties of oligonucleotides, or a group that enhances the pharmacokinetic properties of oligonucleotides;

either one of T_2 and T_5 is OH, a hydroxyl blocking group, phosphate or an activated phosphate group and the other of T_3 and T_5 is a further subunit of said oligomer, or both T_3 and T_5 are a further subunit of said oligomer [T_3 and T_5 independently are OH or a further subunit of said oligomer that is joined to said structure]; and

n is an integer from 0 to about 6.

2) 15. The eligener of claim 9 wherein R_1 is C_4 - C_{20} alkyl.

Lomfound the bligomer of claim wherein R_1 is C_5-C_{20} alkyl.

Please cancel claims 1-8 and 11-14, without prejudice.

Please cancel the abstract, substituting the following abstract.

A replacement sheet for page 52 is provided having the new abstract:

ABSTRACT

The invention relates to oligomers containing 2'-O-alkyl purines having at the 2' position an O - X function where X is $R_1-(R_2)_n$; R_1 is C_3-C_{20} alkyl, C_4-C_{20} alkenyl or C_2-C_{20} alkynyl; R_2 is halogen, hydroxyl, thiol, keto, carboxyl, nitro, nitroso, nitrile, trifluoromethyl, trifluoromethoxy, O-alkyl, S-alkyl, NH-alkyl, N-dialkyl, O-aryl, S-aryl, NH-aryl, O-aralkyl, S-aralkyl, NH-aralkyl, amino, N-phthalimido, imidazole, azido, hydrazino, hydroxylamino, isocyanato, sulfoxide, sulfone, sulfide,